

REMARKS

The pending Office Action addresses claims 1-35, rejecting claims 1-27. Claims 28-35 are withdrawn from consideration.

Amendments to the Claims

Applicant amends independent claim 1 to specify that the sensor is disposed “adjacent to an external surface of” a distal portion of the catheter. Support for this amendment can be found throughout the specification, for example, at page 6, lines 24-26. Applicant also amends independent claim 18 to specify that a proximal end of the at least one wire extending through the catheter is “mated” to an external antenna. Support for this amendment can be found throughout the specification, for example, at page 5, lines 13-16. No new matter is added.

Applicant also cancels withdrawn claims 28-35. Applicant reserves the right to pursue these claims in a divisional application.

Rejection Pursuant to 35 U.S.C. §102

U.S. Patent 5,291,896 to Fonger

The Examiner rejects claims 1-11, 13, and 15-27 pursuant to 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,291,896 to Fonger et al. (“Fonger”). Applicant respectfully disagrees.

Independent claim 1, as amended, recites an implantable fluid management device having an elongate catheter, a sensor disposed adjacent to an external surface of a distal portion of the catheter, and at least one wire having a distal end coupled to the sensor and a proximal end that is adapted to mate to an external component for powering and/or communicating with the sensor.

Fonger does not teach or even suggest a sensor that is disposed adjacent to an external surface of a distal portion of a catheter, as required by independent claim 1. Fonger discloses a cardiac output probe assembly having a chest tube (12) which carries an output probe (14) therein. As shown in Figures 1 and 4 of Fonger, the probe (14) has a transducing head (22) that extends from a distal end of the tube (12) and is adapted to be implanted in an exterior surface (62) of a pulmonary

artery or aorta vessel (64). (Fonger column 3, lines 46-49; column 4, lines 50-52). The Examiner asserts that the tube (12) includes a distally disposed sensor (14). However, Fonger merely teaches extending the transducing head (22) from the distal end of the catheter or retaining the transducing head (22) within the tube (12). Fonger fails to teach or suggest disposing the transducing head (22) adjacent to an external surface of the catheter, as required by amended claim 1. Accordingly, independent claim 1, as well as claims 2-17 which depend directly or indirectly therefrom, distinguish over Fonger and represent allowable subject matter.

Independent claim 18, as amended, recites an implantable fluid management device having an elongate catheter, a sensor disposed at a distal portion of the catheter, at least one wire extending through the catheter, and a slit extending through an outer wall of the catheter. The at least one wire has a distal end that is coupled to a sensor and a proximal end that is mated to an external antenna.

Fonger does not teach or even suggest at least one wire mated to an external antenna, as required by independent claim 18. The Examiner asserts that the electrical connector (26) positioned at the proximal end (28) of the probe (14) is an antenna. However, as explained by Fonger, the electrical connector (26) merely facilitates connection of the probe to external circuitry and instrumentation – it is not an antenna, as required by claim 18. (Fonger column 3, lines 49-54). Accordingly, independent claim 18, as well as claims 19-27 which depend therefrom, distinguish over Fonger and represent allowable subject matter.

Rejection Pursuant to 35 U.S.C. §103

Fonger and Quackenbush

The Examiner rejects claims 12 and 14 pursuant to 35 U.S.C. §103(a) as being obvious over Fonger in view of U.S. Patent 5,104,398 to Quackenbush (“Quackenbush”). The Examiner argues that Fonger teaches the claimed invention except for “the polymer selected from a group consisting of silicones, silicone-like materials, and polyurethanes and wherein the at least one wire is disposed within a secondary catheter coupled to the first that can be peeled apart to allow the catheter length to be adjusted independent the length of the secondary catheter.” The Examiner relies on Quackenbush to teach these features, arguing that it would have been obvious to modify the device of Fonger in

view of Quackenbush to arrive at the claimed invention. Applicant respectfully disagrees.

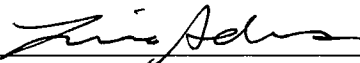
Claims 12 and 14 depend from independent claim 1. As explained above, Fonger fails to teach or even suggest a sensor that is disposed adjacent to an external surface of a distal portion of a catheter, as required by claim 1. Quackenbush does not remedy the deficiencies of Fonger because Quackenbush also fails to disclose a sensor disposed adjacent to an external surface of a catheter. Accordingly, independent claim 1, as well as claims 2-17 which depend directly or indirectly therefrom, distinguish over Fonger and Quackenbush, taken alone or combined, and represent allowable subject matter.

Conclusion

In conclusion, Applicant submits that claims 1-27 are now in condition for allowance, and allowance thereof is respectfully requested. The Examiner is encouraged to telephone the undersigned attorney for Applicant if such communication is deemed to expedite prosecution of this application.

Respectfully submitted,

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